U.S. Patent Application No. 10/516,461
Docket No.: 4590-353

FOR DISCUSSION ONLY

PROPOSED CLAIMS

1. (**Currently Amended**) An optical filtering component, comprising:

a tunable and wavelength selective filter ~~capable of transmitting the~~configured to transmit through the filter light in a narrow optical spectral band centered around a given wavelength, and ~~capable of reflecting the~~reflect light whose wavelength is outside said band;

an input guide ~~conducting~~ configured to conduct a first pass of light radiation to the ~~filters~~filter;

means for returning a first part of the radiation reflected by the filter during the first pass back to the filter in order to perform a second pass through the filter;

an output guide configured to conduct a portion of the light radiation reflected by the filter as a result of the first and second passes;

a unitary collimator, wherein the input guide, output guide, and the returning means are on one side of the collimator, and the filter is on another side of the collimator~~, wherein the input guide conducts the radiation to the filter in order to perform a first pass through it; and~~

~~means for returning a first part of the radiation reflected by the filter during the first pass in order to perform a second pass through it; and collimation means common to the input guide, to the return means and to a second output guide.~~

2. (**Currently Amended**) The optical filtering component as claimed in claim 1, wherein the ~~second~~ output guide ~~conducting~~ is arranged to conduct a fourth part of the

radiation reflected by the filter during the second pass.

3. (**Currently Amended**) The optical filtering component as claimed in claim 1, wherein the collimator comprises a lens arranged between~~, on the one hand,~~ the filter on one side of the lens and,~~ on the other hand,~~ the input guide, the return means and the ~~second~~ output guide on another side of the lens.

4. (Previously Presented) The optical filtering component as claimed in claim 3, wherein the lens is a graded index lens.

5. (Previously Presented) The optical filtering component as claimed in claim 4, wherein the lens is such that its object focal plane coincides with an input face of the lens.

6. (Previously Presented) The optical filtering component as claimed in claim 1, wherein the return means direct the first part of the radiation to the filter, with the same incidence as the input guide.

7. (Previously Presented) The optical filtering component as claimed in claim 1, wherein it includes means for tuning the given wavelength.

8. (Previously Presented) The optical filtering component as claimed in claim 1,

wherein it includes means for inserting replacement radiation whose length is substantially centered on the given wavelength.

9. (Previously Presented) The optical filtering component as claimed in claim f1, wherein the return means are produced by means for glass plate photolithograpy and ion exchange.

10. (Previously Presented) The optical filtering component as claimed in claim 1, wherein it includes means for amplifying the radiation reflected by the filter.

11. (**Currently Amended**) The optical filtering component as claimed in claim 2, ~~wherein it includes~~further comprising a lens arranged between~~, on the one hand,~~ the filter on one side and~~, on the other hand,~~ the input guide, the return means and the ~~second~~ output guide on another side of the lens.

12. (**Canceled**).

13. (Original) The optical filtering component as claimed in claim 2, wherein the return means direct the first part of the radiation to the filter, with the same incidence as the input guide.

14. (Original) The optical filtering component as claimed in claim 3, wherein the

return means direct the first part of the radiation to the filter, with the same incidence as the input guide.

15. (Original) The optical filtering component as claimed in claim 2, wherein it includes means for tuning the given wavelength.

16. (Original) The optical filtering component as claimed in claim 3, wherein it includes means for tuning the give wavelength.

17. (Original) The optical filtering component as claimed in claim 4, wherein it includes means for tuning the give wavelength.

18. (Original) The optical filtering component as claimed in claim 2, wherein it includes means for inserting replacement radiation whose length is substantially centered on the give wavelength.

19. (Original) The optical filtering component as claimed in claim 3, wherein it includes means for inserting replacement radiation whose length is substantially centered on the given wavelength.

20. (Original) The optical filtering component as claimed in claim 2, wherein the return means are produced by means for glass plate photolithography and ion

exchange.

21. (Original) The optical filtering component as claimed in claim 2, wherein it includes means for amplifying the radiation reflected by the filter.

22. (Original) The optical filtering component as claimed in claim 2, wherein it includes means for amplifying the radiation reflected by the filter.

23. (**Currently Amended**) The optical filtering component as claimed in claim 3, wherein it includes means for amplifying the radiation reflected by the ~~fitler~~filter.

24. (Original) The optical filtering component as claimed as claim 1, wherein the input and output guides are distinct.